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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,357	06/02/2006	Raymond Campagnolo	291448US6X PCT	4580

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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

MELLON, DAVID C

ART UNIT	PAPER NUMBER
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1777

NOTIFICATION DATE	DELIVERY MODE
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10/06/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/581,357	Applicant(s) CAMPAGNOLO ET AL.	
	Examiner DAVID C. MELLON	Art Unit 1777	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 37,40,42-44,48,50,51,53 and 73 is/are pending in the application.
- 5a) Of the above claim(s) 48 and 50 is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 37,40,42-44,51,53 and 73 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claim 37 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. **Claims 37, 40, 42-44, 51, 53, and 73 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claim 37 recites the limitation "the second receptacles" in line 11. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 37, the limitation of "to divide into the plurality of residues" renders the claim indefinite and unclear. It is unclear by this limitation if the claim intends for the residue to divide into a plurality of residues in a single channel, some of the channels, or all of the channels. Additionally, since the residue has already entered the channel(s), it is unclear as to whether the magnet or the channel structure is performing the dividing effect.

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 37, 40, 42-44, 51, 53, and 73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amada et al. (JP 2001-221799 as cited on the IDS filed 12/16/2010) and in view of Tanaami (US 2002/0137226).

Regarding claims 37, 51, 73, Amada et al. discloses a method for dividing an analyte present in a solution (title/abstract) in figures 1(a/b) comprising:

Disposing the solution including the analyte fixed to magnetic particles in a first receptacle ([0077-0082] - see in figure 1b the left portion before the split represents the first receptacle portion)

Attracting with a magnetic mechanism the magnetic particles fixed to the analyte to a bottom of the first receptacle and forming an initial residue at the bottom ([0081-0082 - sedimentation)

After forming the initial residue, dividing the residue into a plurality of residues by transporting the residue through channels to second receptacles (right side on figure 1b) by a magnetic mechanism ([0082-0084]).

Amada is silent as to the use of two separate magnetic mechanisms, one for attraction and one for motion.

Tanaami discloses the use of a magnetic bead based migration method (title/abstract) using a mobile stic magnet in figure 6 to provide for transition of beads from a well to a detector. Tanaami further discloses that the stic magnet may be swept in a linear manner (see figure 6, also [0046-0047]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the process of Amada to further include the use of a linearly

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displaced stic magnet (21) of Tanaami as a second magnet for the purpose of providing for a second and independent magnetic mechanisms which would allow for a continuous operation utilizing both agglomeration of newly added material and transport of previously added materials. Additionally, a benefit of being able to select different strengths of magnets for the task would provide for optimizable separation process by tailoring the magnet strengths to a single task.

Alternatively, it would have been obvious to one of ordinary skill in the art to have replaced the magnet mechanism with the magnet (21) of Tanaami for the purpose of providing for a constant magnetic force moving in a linear direction to displace the residues. Further, upon review of the instant disclosure, there is no requirement that the first and second magnetic mechanisms be separate. Additionally, the instant claims do not necessarily require that the mechanisms be two separate mechanisms.

Regarding claim 40, Amada discloses in figure 1d the use of parallel channels. Additionally, the channels of figure 1b may be considered to run in the same general direction providing for a parallel flow mechanism.

Regarding claim 41, Amada discloses the use of a single magnet entity as an option for operation.

Regarding claim 42, the residue would either be in a linear shape or it would have been obvious to have formed a linear shape residue in view of using a bar shaped magnet.

Regarding claim 43, each channel is located on the same side of the initial residue in a direction of displacement by the magnetic mechanism (see figure 1b or 1d).

Regarding claim 44, the magnetic mechanism includes a linear magnet that moves relative to the channels.

Regarding claim 53, the residues are all divided into equal quantities which feed into each receptacle (see figure 1b).

Conclusion

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID C. MELLON whose telephone number is (571)270-7074. The examiner can normally be reached on Monday through Thursday 9:00am-5:30pm EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vickie Kim can be reached on (571) 272-0579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/TONY G SOOHOO/
Primary Examiner, Art Unit 1774

/D. C. M./
Examiner, Art Unit 1777